

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Piedmont Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Bear Island Paper Company, LLC.
10026 Old Ridge Road, Ashland, Virginia
Permit No. PRO50840

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Bear Island Paper Company, LLC. has applied for a Title V Operating Permit for its 10026 Old Ridge Road, Ashland, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:

Patti A. Procise
(804) 527-5114

Date:

Air Permit Manager:

James Kyle

Date:_____

Regional Permit Manager:

James Golden

Date:

FACILITY INFORMATION

Permittee

Bear Island Paper Company LLC
10026 Old Ridge Road
Ashland Va. 23005

Facility

Bear Island Paper Company, L.L.C.
10026 Old Ridge Road
Ashland, Virginia

AFS ID No: 51-085-0042

SOURCE DESCRIPTION

SIC Code: 2621- Pulp Mill establishments primarily engage in manufacturing pulp from wood or from other materials, such as rags, linters, wastepaper, and straw. Establishments engaged in integrating logging and pulp mill operations are classified according to the primary products shipped. Establishments engaged in integrated operations of producing pulp and manufacturing paper, paperboard, or products thereof are classified in Industry 2621 if primarily shipping paper or paper products.

The facility manufactures newsprint. The facility mixes newsprint made from trees with recycled paper. Bear Island Paper Company manufacturing facility consists of the following: wood yard, thermomechanical paper mill, sludge dryer (not operating), B&W combination boiler, package boiler, wastewater treatment plant, recycle mill, and paper machine.

The facility is a Title V major source of Particulate Matter (PM), PM-10, PM 2.5, NO_x, SO₂, CO, and VOC. The source is located in an attainment area for all pollutants. A RACT Consent Agreement was established on July 12, 1996. A State Operating Permit was issued 06/30/2004 to which this permit superseded the following permits and amendments dated June 6, 1977 as amended December 20, 1994, December 23, 1997, March 19, 2001, and July 6, 2001 and this permit also supercedes the PSD permit dated October 30, 1992 as amended March 31, 1995, November 20, 1995, May 28, 1997, and July 25, 1997.

COMPLIANCE STATUS

The last full compliance evaluation (FCE) of this facility was completed 08/25/2004, including a site visit conducted 08/10/2004. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility had not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment: COMBINATION BOILER (B&W)							
PH-1A	PH-1S	Coal Use Crusher/Conveyor/Handling	243 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
PH-1B	PH-1S	Bark/Paper Sludge/Wood Chips/Combustion	243 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
PH-1C	PH-1S	Number 2 Fuel Oil Combustion	243 mmBtu/hr	Multi-cyclone, Electrostatic Precipitator and low sulfur fuels not to exceed 0.2%	PHC-1A PHC -B	PM, PM-10, SO ₂	06/30/04
PH-1ABC	PH-1S	Natural Gas	5.2 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
PH-1ABC	PH-1S	Propane	12.5 mmBtu/hr	Multi-cyclone and Electrostatic Precipitator	PHC-1A PHC -B	PM/PM-10	06/30/04
Fuel Burning Equipment: PACKAGE BOILER - Unit Ref. #3 – NSPS (40 CFR 60.40b Subpart Db)							
PH2-2A	PH2-2S	Natural Gas/Propane Combustion	255 mmBtu/hr	Clean burning fuels	None	PM/PM-10	06/30/04
PH2-2B	PH2-2S	Number 2 Fuel Oil	247 mmBtu/hr	Low sulfur fuels, not to exceed 0.2% <u>and</u> low nitrogen fuels, not to exceed 0.3% by weight.	None	SO ₂ & NO _x	06/30/04

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Wood Yard – Unit Ref. #4							
WY-1A	Fugitive	Wood Yard	1,600 BDT/day BDT = Bone Dry Tons	None	None	None	06/30/04
WY-1B (WY-11, WY-12, WY-13)	VENT	Wood Yard Log Handling, Chip/Bark/Sludge Handling, Bark/Chip Piles, Wood Waste, Slashing	1,600 BDT/day BDT = Bone Dry Tons	Enclosure Est. Efficiency 95%	None	None	06/30/04
TMP-Process – Unit Ref. #1							
TMP-1	Fugitive	Entire Wood Fiber Line	942 ADT/Day ADT = Air Dry Tons	-	-	PM/PM-10	-
TMP-1A	TMP-1AS	Latency Transfer Chest and Rejects Chest	942 ADT/Day ADT = Air Dry Tons	Heat Recovery and Condenser System Unit 1 (2 Stage)	PHC-1A	VOC Rated at 40.5 %	RACT July 12, 1996 Consent Agreement
TMP-1B	TMP-1BS	Steam Tubes and Atmospheric Refiners	942 ADT/Day ADT = Air Dry Tons	Heat Recovery and Condenser System Unit 2 (2 Stage)	PHC-1B	VOC Rated at 40.5 %	RACT July 12, 1996 Consent Agreement
TMP-1C	TMP-1CS	Thickener	942 ADT/Day ADT = Air Dry Tons	None	None	None	RACT July 12, 1996 Consent Agreement
TMP-51D	TMP-1CS	Reject Refiners	942 ADT/Day ADT = Air Dry Tons	None	None	None	RACT July 12, 1996 Consent Agreement

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Wastewater Treatment Plant – Unit Ref. #5							
WWTP-1	Fugitive	Wastewater Treatment Plant – hydraulic cap.	4.2 MGD and 4.8 MGD daily max. MGD = mm gal/day	None	None	None	Letter: Re-rating WWTP June 10, 2002
Paper Mill – Unit Ref. #6							
PM-1A	VENTS PM 1-12	Paper De-watering, Forming and Drying	39 BDT/hr BDT = Bone Dry Tons	None	None	VOC	
PM-1B	VENTS PM 1-12	Paper Machine Cleaning	39 BDT/hr BDT = Bone Dry Tons	None	None	VOC	
Recycle Plant – Unit Ref. #7							
RPM01	Fugitive	Recycle Facility: Drum Pulper, Screens, Flotation Cells, Disc Thickener, Double Wire Press, Post-Flotation, Drum Washer	254 BDT/day - output	None	None	PM/PM-10 & VOC	
Parts Washers							
MI-I1	Fugitive	7 Assorted Parts Washers totalling 266 gallons – Non Halogen – Safety Clean Services.	266 gallons - Total <u>combined</u> capacity. 2 @ 26 gallons, 3 @ 77 gallons and 2 @ 30 gallons.	None	None	VOC	

EMISSIONS INVENTORY

A copy of the 2003, Pollution Emissions Report is attached. Emissions are summarized in the following tables.

<u>2003 Facility Criteria Pollutant Emissions in TPY</u>							
Pollutants	PM	PM₁₀	PM_{2.5}	NO_x	SO₂	CO	VOC
TPY Totals	120.80	110.17	110.17	265.48	519.88	579.96	469.24

<u>2003 Facility Hazardous Air Pollutant Emissions in TPY</u>	
Pollutants	TPY Totals
ACETA	11.04
ACREN	2.17
BZ	2.30
CLFM	2.05
FORM	2.57
HCL	23.94
HF	2.16
MC	0.16
MTETN	0.32
MTHOL	12.30
NH₃	0.05
NHEXA	0.02
PB	0.00
PHNL	0.07
STYR	1.04
TCA	0.01
TOLU	0.50

EMISSION UNIT APPLICABLE REQUIREMENTS

B&W COMBINATION BOILER - Unit Ref. #2

The B&W combination boiler is not subject to the NSPS – Fossil Fuel Fired Steam Generators (40 CFR 60 subpart D) because the boiler does not meet the 250 mmBtu/hr. rated capacity.

Limitations

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 4: Particulate Matter (PM) and PM-10 emissions from the B&W combination boiler, Unit Ref. No. 2, shall be controlled by a multi-cyclone followed by an electrostatic precipitator. The electrostatic precipitator shall be equipped with monitoring devices that continuously measure the primary voltage, primary current and secondary current. The electrostatic precipitator shall be provided with adequate access for inspection.

9 VAC 5-50-260

Included as Condition III A.1

Condition 5: Carbon monoxide emissions from the B&W combination boiler, Unit Ref. No. 2, shall be controlled by the coal and wood waste burner arrangement.

(9 VAC 5-50-20, 9 VAC 5-80-110)

Included as Condition III A.2

Condition 7: Sulfur dioxide emissions from the B&W combination boiler, Unit Ref. No. 2 and package boiler, Unit Ref. No. 3, shall be controlled by required use of low sulfur fuel and shall not exceed 0.2 percent by weight per shipment.

(9 VAC 5-80-10, 9 VAC 5-80-110)

Included as Condition III A.3

Condition 11: The B&W combination boiler, Unit Ref. No. 2, shall not fire wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day unless the boiler is also firing coal in combination with wood, wood waste and paper sludge/paper waste.

(9 VAC 5-170-160, 9 VAC 5-80-110, 9 VAC 5-50-20)

Included as Condition III A.5

Condition 12: The oxygen content of the flue gas, of the B&W combination boiler, Unit Ref. No. 2, shall not be less than 2 percent by weight when the boiler is firing wood waste and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The B&W combination boiler shall be equipped with an oxygen sensor. The oxygen sensor shall be maintained such that it is in proper working order at all times. The oxygen content of the boiler shall be recorded a minimum of once every eight hour shift when the B&W combination boiler is firing wood waste and paper sludge/paper waste in excess of 450 tons per day. The oxygen readings shall be used to calculate a thirty (30) day rolling average.

(9 VAC 5-50-20, 9 VAC 5-80-110)

Included as Condition III A.6

Condition 20: The approved fuels for the B&W combination boiler, Unit Ref. No. 2, are bituminous coal, distillate oil, natural gas, propane, wood waste, and paper waste/sludge resulting from paper recycling, the TMP process and wastewater treatment at the facility. A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-1100, 9 VAC 5-80-110)

Included as Condition III A.7

Condition 21: The sulfur and ash content of the coal to be burned in the B&W combination boiler, Unit Ref. No. 2, shall not exceed 1.2 percent and 12 percent by weight, respectively, per shipment. The permittee shall maintain records (supplier fuel analysis) of all coal shipments purchased. These records shall be available for inspection by the DEQ. Such records shall be current for the most recent five (5) years.

(9 VAC 5-170-160, 9 VAC 5-80-110, 9 VAC 5-80-1100)

Included as Condition III A.8

Condition 27: Emissions from the operation of the B&W combination boiler, Unit Ref. No. 2, shall not exceed the limits specified below:

Total Suspended Particulate	0.10 lbs/10⁶ Btu	24.3 lbs/hr	106.4 tons/yr
PM-10	0.10 lbs/10⁶ Btu	24.3 lbs/hr	106.4 tons/yr
Sulfur Dioxide		518.4 lbs/hr	2270.6 tons/yr
Nitrogen Oxides (as NO₂)	0.70 lbs/10⁶ Btu	170.1 lbs/hr	745.0 tons/yr
Carbon Monoxide		257.2 lbs/hr	1126.3 tons/yr
Volatile Organic Compounds		7.0 lbs/hr	30.7 tons/yr

(9 VAC 5-50-260, 9 VAC 5-80-110)

Included as Condition III A.9

Condition 30: Visible emissions from the B&W combination boiler, Unit Ref. No. 2, shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-50-80, 9 VAC 5-50-20 and 9 VAC 5-80-110)

Included as Condition III A.10

Applicable Requirements from the July 12, 1996 RACT Consent Agreement: The following limitations are applicable requirements from the RACT Consent Agreement issued on July 12, 1996.

Condition E-3: Volatile Organic Compound emissions (VOC) from the B&W combination boiler, Unit Ref. No. 2 shall be controlled by the use of good combustion practices.

(9 VAC 5-80-110)

Included as Condition III A.4

Applicable Requirement based on Article 4-15 Standards for Coal Preparation: The following limitations are applicable.

Minimum standards for visible and fugitive emissions from the crushing, conveying, storage, and handling of coal used in the B&W combination boiler, Unit Ref. No. 2, shall apply as stated in Article 4-15 – Standards for Coal Preparation.

(9 VAC 5-40-1990 and 9 VAC 5-40-2000)

Included as Condition III A.11

Monitoring

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 14: A continuous monitoring system for measuring and recording the nitrogen oxides emissions from the B&W combination boiler, Unit Ref. No. 2, stack shall be installed, calibrated, maintained and operated by the owner or operator unless it is demonstrated during performance tests that the emissions of nitrogen oxides is 30 percent or more below the allowable of 0.70 pounds/10⁶ BTU heat input (less than 0.49 pounds/10⁶ BTU heat input).

(9 VAC 5-170-160, 9 VAC 5-50-20, 9 VAC 5-80-110)

Included as Condition III B.1

Condition 15: A continuous monitoring system for measuring and recording the opacity of the B&W combination boiler, Unit Ref. No. 2, stack emissions shall be installed, calibrated, maintained and operated by the owner or operator.

(9 VAC 5-50-20, 9 VAC 5-50-40, 9 VAC 5-80-110)

Included as Condition III B.2

Recordkeeping

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 33: The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of (each permitted fuel) coal, distillate oil, propane, natural gas, wood waste and paper waste/sludge fired in the B&W combination boiler, Unit Ref. #2, calculated monthly as the sum of each consecutive 12-month period.
- b. Certification for each coal shipment purchased, indicating sulfur (not to exceed 1.2 percent) content and ash (not to exceed 12 percent) content by weight, respectively, per shipment.
- c. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
- d. CEM records for the B&W combination boiler.
- e. Once per shift the electrostatic precipitator meter/gauge readings to include the primary and secondary voltage and amperage readings.
- f. Records indicating coal usage when wood, wood waste and paper sludge/paper waste is being fired in excess of four hundred and fifty (450) tons per day.
- g. The B&W combination boiler flue gas oxygen content shall be recorded when the boiler is firing wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The oxygen readings shall be averaged on a thirty (30) day rolling basis.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110)

Included as Condition III C.1

PACKAGE BOILER – Unit Ref. #3 – SUBJECT TO NSPS (40 CFR 60 Db)

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Limitations

Condition 6: Nitrogen oxide emissions from the package boiler, Unit Ref. No. 3, shall be controlled by boiler design, and good operation procedures. The package boiler shall be provided with adequate access for inspection.

(9 VAC 5-80-20, 9 VAC 5-80-110)

Included as Condition IV.A.1

Condition 8: Particulate matter emissions from the package boiler, Unit Ref. No. 3, shall be controlled by the use of clean burning fuels.

(9 VAC 5-80-20, 9 VAC 5-80-110)

Included as Condition IV.A.2

Condition 9: Carbon monoxide and volatile organic compound emissions from the package boiler set, Unit Ref. No. 3, shall be controlled by the use of good combustion operating practices.

(9 VAC 5-80-10, 9 VAC 5-80-110)

Included as Condition IV.A.3

Condition 13 & 22: The maximum nitrogen content of the oil to be burned in the package boiler, Unit Ref. No. 3, shall not exceed 0.3 percent by weight per shipment. The maximum sulfur content of the oil to be burned in the package boiler shall not exceed 0.2 percent (facility-wide limitation). The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier
- b. The date on which the oil was received
- c. The volume of distillate oil delivered in the shipment
- d. The nitrogen and sulfur content of the oil

(9 VAC 5-170-160, 9 VAC 5-50-410, 9 VAC 5-80-110, 9 VAC 5-50-20)

Included as Condition IV.A.4

Condition 24: The package boiler, Unit Ref. No. 3, shall consume no more than the following:

Natural Gas	255 x 10 ³ ft ³ per hour	735.0 x 10 ⁶ ft ³ per year
Propane	2.78 x 10 ³ gal per hour	8.01 x 10 ⁶ gal per year
No. 2 Fuel Oil	1890 gal per hour	5.40 x 10 ⁶ gal per year

When using a combination of natural gas, propane and No. 2 fuel oil during any calendar year, the annual heat input shall not exceed 7.35x10¹¹ BTU based on a higher heating value of 1000 BTU/ft³ for natural gas, 91,690 BTU/GAL for propane, and 1.31x10⁵ BTU/gal for No. 2 fuel oil.

(9 VAC 5-170-160, 9 VAC 5-80-110)

Included as Condition IV.A.5

Condition 25: The package boiler, Unit Ref. No. 3, shall not operate more than 2880 hours per calendar year.

(9 VAC 5-170-160, 9 VAC 5-80-110)
Included as Condition IV.A.6

Condition 16 & 26: The package boiler, Unit Ref. No. 3, shall not operate more than 10 percent of the maximum "annual capacity factor" unless the requirements as stated in specific Condition IV.B.1 of this permit have been met. The annual capacity factor is defined in 40 CFR 60 subpart Db paragraph 60.41b. (9 VAC 5-170-160, 9 VAC 5-80-110, 9 VAC 5-50-410)
Included as Condition IV.A.7

Condition 28: Criteria pollutant emissions from the operation of the package boiler, Unit Ref. No. 3, shall not exceed the limitations specified below:

- **NATURAL GAS**

	Pounds per 10 ⁶ BTU	Pounds per hour
TSP	5.1 x 10 ⁻³	1.3
PM-10	5.1 x 10 ⁻³	1.3
Sulfur Dioxide (3-hour rolling average)	2.8 x 10 ⁻³	0.7
Nitrogen Oxides (30-day rolling average)	1.0 x 10 ⁻¹	25.5
Carbon Monoxide		5.1
Volatile Organic Compounds		2.6

- **PROPANE/AIR MIXTURE**

	Pounds per 10 ⁶ BTU	Pounds per hour
TSP	5.1 x 10 ⁻³	1.3
PM-10	5.1 x 10 ⁻³	1.3
Sulfur Dioxide (3-hour rolling average)	2.8 x 10 ⁻³	
Nitrogen Oxides (30-day rolling average)	1.0 x 10 ⁻¹	25.5
Carbon Monoxide		5.1
Volatile Organic Compounds		2.6

- **NO. 2 FUEL OIL**

	Pounds per 10 ⁶ BTU	Pounds per hour
TSP	1.0 x 10 ⁻¹	25.5
PM-10	1.0 x 10 ⁻¹	25.5
Sulfur Dioxide (3-hour rolling average)	2.2 x 10 ⁻¹	56.1
NO _x (30-day rolling average)	1.0 x 10 ⁻¹	25.5
Carbon Monoxide		4.9
Volatile Organic Compounds		2.5
Lead		0.002

Must be met at all times except start-ups, shutdowns including malfunctions.

PACKAGE BOILER MAXIMUM ANNUAL EMISSIONS

TONS PER YEAR

TSP	36.7 tons/yr
PM-10	36.7 tons/yr
Sulfur Dioxide	80.8 tons/yr
Nitrogen Oxides	36.7 tons/yr
Carbon Monoxide	7.3 tons/yr
Volatile Organic Compounds	3.7 tons/yr
Lead	5.8 lbs/yr

(9 VAC 5-50-260, 9 VAC 5-80-110, 9 VAC 5-50-410)
Included as Condition IV.A.8

Condition 29: Total toxic pollutant emissions from the package boiler, Unit Ref. No. 3, shall not exceed the limitations specified below:

	Pounds per hour	Tons per Year
Benzene	0.1	0.2
Formaldehyde	0.1	0.1
Arsenic	0.001	0.001
Beryllium	0.001	0.001
Cadmium	0.003	0.004
Chromium	0.01	0.02
Copper	0.07	0.1
Manganese	0.003	0.005
Mercury	0.001	0.001
Nickel	0.04	0.06
Selenium	0.006	0.00828
Vanadium	0.02	0.03

(9 VAC 5-50-260)
Included as Condition IV.A.9

Condition 31: Visible emissions from package boiler, Unit Ref. No. 3, exhaust shall not exceed 10 percent opacity, except during one six-minute period per hour which shall not exceed 20 percent opacity.
(9 VAC 5-170-160, 9 VAC 5-80-110, 9 VAC 5-50-410)
Included as Condition IV.A.10

Monitoring

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 16 & 28: A continuous emissions monitoring system shall be installed and operational within ninety (90) calendar days of exceeding 10 percent of the annual capacity factor. The continuous emission monitoring system (CEMS) consisting of a NO_x monitor and a suitable diluent monitor (either CO₂ or O₂), shall be installed on the package boiler, Unit Ref. No. 3. Each NO_x CEMS shall be performance tested in accordance with EPA Performance Specification No. 2 (40 CFR 60, Appendix B). Data from the NO_x CEMS shall be used to determine compliance with the emission standard (in lbs/MMBtu) on a thirty (30) day rolling average as stated in specific Condition 28 of the 06/30/2004 permit. All of the CEM calculation, data reduction, recordkeeping, and reporting requirements of NSPS Subpart Db shall apply. A thirty (30) day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the Department (Director, Piedmont Regional Office).
(9 VAC 5-50-40 F, 9 VAC 5-50-410, 9 VAC 5-80-110)
Included as Condition IV.B.1

Condition 17: A continuous opacity monitoring system shall be installed on the package boiler, Unit Ref. No. 3, stack to measure opacity when the boiler is burning No. 2 fuel oil. The continuous opacity monitor shall be installed and operational within ninety (90) calendar days of the actual firing of No. 2 oil in the package boiler. The opacity monitor shall be performance-tested in accordance with EPA Performance Specification No. 1 (40 CFR 60, Appendix B). A thirty (30) day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the Department Director, Piedmont Regional Office.

(9 VAC 5-50-40 F, 9 VAC 5-50-410, 9 VAC 5-80-110)

Included as Condition IV.B.2

Condition 18: The continuous monitoring data generated by the opacity monitor may, at the discretion of the Board, be used as evidence of violation of the emission standards. These data shall be kept on file and made available to the Department upon request.

(9 VAC 5-50-40 F)

Included as Condition IV.B.3

Condition 19: The NOx and opacity monitoring systems shall meet a minimum data availability of 90 percent of package boiler, Unit Ref. No. 3, operating hours on a 12-month rolling average. The NOx monitoring systems shall also meet the quality assurance requirements of 40 CFR part 60, Appendix F.

(9 VAC 5-170-160, 9 VAC 5-80-110)

Included as Condition IV.B.4

Recordkeeping

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 17 & 33: The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual throughput of (each permitted fuel) distillate oil, propane and natural gas in the package boiler, Unit Ref. #3, calculated monthly as the sum of each consecutive 12-month period.
- b. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
- c. Dates and hours of operation for the package boiler not to exceed two thousand eight hundred and eighty hours (2,880) calculate as the sum of each consecutive 12-month period.
- d. CEM records for the package boiler (upon compliance with Condition 17 of 06/30/2004 Permit).
- e. Annual capacity factor calculations for the package boiler; annual capacity factor is defined in 40 CFR subpart Db paragraph 60.41b.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 5-20-110)

Included as Condition IV.C.1

Testing

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 17 & 35: Performance testing for the package boiler, Unit Ref. No. 3 shall be conducted for nitrogen oxides as required in 40 CFR 60 subpart Db paragraph 60.46b (h) 2 until requirements stated in Condition 17 of the 06/30/2004 Permit have been met. The required testing shall be conducted on an annual basis or after each four hundred (400) hours of boiler operation, whichever occurs first. Testing shall be conducted within thirty (30) calendar days of exceeding four hundred (400) hours of operating time.

(9 VAC 5-170-160, 9 VAC 5-50-410, 9 VAC 5-80-110)

Included as Condition IV.D.1

Reporting

The permittee shall submit fuel quality reports to the Director, Piedmont Region, within thirty (30) days after the end of each calendar quarter. If no shipments of distillate oil were received during the calendar quarter, the quarterly report shall consist of the dates included in the calendar quarter and a statement that no oil was received during the calendar quarter. If distillate oil was received during the calendar quarter the reports shall include:

- a. The dates included in the calendar quarter,
- b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar quarter or a quarterly summary from each fuel supplier that includes the information specified in Condition IV.A.4 for each shipment of distillate oil, and
- c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-110)

Included as Condition IV.E.1

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 31 & 37: In the case that the package boiler, Unit Ref. #3 fires No. 2 fuel oil or exceeds 10 percent of the annual capacity factor the, a NOx or opacity monitor shall be installed and therefore the permittee shall be required to submit reports to the Director, Piedmont Regional Office within thirty (30) days after the end of each calendar quarter as described in 40 CFR 60.49b (h) and (i). Details of the quarterly reports are to be arranged with the Director, Piedmont Regional Office. With regard to the opacity monitor, the quarterly report shall include excess emission and monitoring system downtime reports and/or summaries in accordance with 40 CFR § 60.7 (c) and (d). Excess opacity emissions are defined as periods for which the average opacity exceeds the limit stated in specific Condition 31 of permit 06/30/2004.

(9 VAC 5-50-50, 9 VAC 5-170-160)

Included as Condition IV.E.2

WOOD YARD – Unit Ref. #4

Applicable Requirement based on Existing Stationary Source Standards – 9 VAC 5-40 and New and Modified Stationary Sources and BACT 9 VAC 5-50: The following limitations are applicable:

Limitations

Particulate emissions from the slashing process shall be controlled by good air pollution control practices. The slashing process shall be provided with adequate access for inspection.

(9 VAC 5-40-80, 9 VAC-40-330, 9 VAC-5-50-300 and 9 VAC 5-80-110)

Included as Condition V.A.1

Particulate emissions from coal handling, slashing, debarking and chipping process operations shall not exceed the standards set in Article 4, table 4-4A.

(9 VAC 5-40-260)

Included as Condition V.A.2

Fugitive dust shall be controlled as follows and in accordance with Chapter 40 Articles 1 and 4, and Chapter 50 Article 1:

- a. Debarking shall take place in an enclosed building;
- b. Bark shall be conveyed pneumatically to the boiler through a closed conduit;
- c. Emissions from the chipper shall be controlled by: an enclosed building; use of a closed system cyclone; and pneumatic transport of chips;
- d. Coal shall be stored in a storage pile and conveyed to the boiler using a covered conveyor;
- e. All material being stockpiled shall be kept moist, as needed, to control dust during storage and handling to minimize emissions.
- f. Haul roads shall be controlled by wet suppression, asphalt, or other suitable chemicals, as needed. The main entrance road shall be paved. Reasonable precautions shall be taken to prevent disposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-40-80, 9 VAC-40-330, 9 VAC-5-50-300 and Condition 10 of the 06/30/2004 Permit)

Included as Condition V.A.3

Good air pollution control practices and enclosure shall control particulate emissions from the debarking/chipping process. The debarking/chipping process and enclosure shall be provided with adequate access for inspection.

(9 VAC 5-50-20, 9 VAC 5-50-260, and 9 VAC 5-80-110)

Included as Condition V.A.4

Visible emission from the debarking/chipping process shall not exceed 20 percent opacity except during on one (1) six-minute period in any one-hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-80-110)

Included as Condition V.A.5

Monitoring

Applicable Requirement based on Existing Stationary Source Standards – 9 VAC 5-40 and New and Modified Stationary Sources and BACT 9 VAC 5-50: The following limitations are applicable:

An annual internal assessment shall be conducted on the enclosure by the permittee to insure structural integrity, and to insure the equipment is in proper operating condition.
(9 VAC 5-50-20 and 9 VAC 5-80-110)
Included as Condition V.B.1

The debarking/chipping process enclosure vents shall be observed visually for emissions at a minimum of once (1) each calendar week in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60 appendix A Method 22 techniques (condensed water vapor/steam is not a visual emission) for at least a brief time to identify the presence of visual emissions. If the debarking/chipping process enclosure vent is observed having visible emissions, it shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visual emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visual emissions. If the six (6) minute VEE exceeds the unit's opacity limitation, a VEE shall be conducted on these emissions for at least three (3) - six (6) minute periods (at least 18 minutes). Visual emissions shall not exceed 20 percent opacity but not greater than 30 percent opacity for more than one six minute period in any one hour. All visible emission observations, VEE results, and corrective actions shall be recorded.

40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE.
(9 VAC 5-80-110 and 9 VAC 5-50-50)
Included as Condition V.B.2

Recordkeeping

Applicable Requirement based on Existing Stationary Source Standards – 9 VAC 5-40 and New and Modified Stationary Sources and BACT 9 VAC 5-50: The following limitations are applicable:

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Records of annual internal inspection
- b. Records of visual opacity tests.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-50 and 9 VAC 5-80-110)
Included as Condition V.C.1

Thermomechanical Pulp Mill – Unit Ref. #1

Applicable Requirements from the July 12, 1996 RACT Consent Agreement: The following limitations are applicable requirements from the RACT Consent Agreement issued on July 12, 1996.

Limitations

Condition E-4: VOC emissions from the steam tubes, primary refiners, and secondary refiners for the four (4) TMP lines shall be controlled by a double pass, plate, and frame water heat exchanger/condenser equipped with a quench water spray. The two (2) stage heat exchanger/condenser shall use water as the heat transfer medium.

(9 VAC 5-40-300)

Included as Condition VI.A.1

Condition E-5: VOC emissions from the latency transfer chest and the rejects latency chest for the four (4) TMP lines shall be controlled by a double pass, plate, and frame heat exchanger/condenser. The first stage of the heat exchanger/condenser shall use water as a heat transfer medium. The second stage of the condenser shall use glycol as the heat transfer medium.

(9 VAC 5-40-300)

Included as Condition VI.A.2

Condition E-6: Bear Island shall maintain a minimum overall VOC emission removal efficiency of forty point five (40.5) percent on a mass basis from the TMP emissions sources which follow: steam tubes, primary refiners, secondary refiners, latency transfer chest, and rejects latency chest from all four (4) TMP lines.

(9 VAC 5-40-300)

Included as Condition VI.A.3

Condition E-9: The glycol heat transfer system shall operate at a minimum flow rate of three hundred (300) gallons per minute.

(9 VAC 5-40-300)

Included as Condition VI.A.4

Condition E-10: The two (2) water heat transfer systems shall operate at a minimum flow rate of two hundred (200) gallons per minute.

(9 VAC 5-40-300)

Included as Condition VI.A.5

Condition E-12: The heat exchangers/condensers shall operate at all times when the TMP mill is in operation.

(9 VAC 5-40-300)

Included as Condition VI.A.6

Condition E-18: The condensation from the two (2) heat exchangers/condensers shall be discharged to the Waste Water Treatment Plant.

(9 VAC 5-40-300)

Included as Condition VI.A.7

Condition E-23: In order to minimize the duration and frequency of excess emissions due to the malfunctions of process or air pollution control equipment, Bear Island shall:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance, including dates and duration of any outages. These records shall be maintained on site for a period of five (5) years and shall be made available to the DEQ upon request.
- b. Maintain an inventory of spare parts that are needed to minimize duration of air pollution control equipment breakdowns.

(9 VAC 5-40-300)

Included as Condition VI.A.8

Monitoring

Applicable Requirements from the July 12, 1996 RACT Consent Agreement: The following limitations are applicable requirements from the RACT Consent Agreement issued on July 12, 1996.

Condition E-7: The three (3) heat transfer systems contained in the two (2) heat exchangers/condensers shall be equipped with inlet temperature and outlet temperature gauges. The inlet and outlet heat transfer system temperatures shall be measured continuously. The inlet and outlet temperatures shall be recorded once per eight (8) hour shift. The inlet and outlet temperatures shall be used to calculate a temperature differential for each heat transfer system. The temperature differentials shall be averaged on a daily basis. All continuous monitoring devices shall be maintained and calibrated in accordance with the manufacturer's specifications. At a minimum the continuous monitoring devices shall be calibrated annually and the results of the calibrations recorded.

Three (3) standard deviations will be used to determine the minimum temperature differentials for the condensers, which are as follows:

HRS #1 – Water Side: 45°F
HRS #1 – Glycol Side: 4°F
HRS #2 – Water Side: 53°F

(9 VAC 5-40-300)

Included as Condition VI.B.1

Condition E-8: The two (2) water heat transfer systems shall be equipped with liquid flow meters. The meters shall measure the amount of liquid flowing through the water heat transfer system continuously. The information from the meters shall be recorded once per eight (8) hour shift to calculate an average daily liquid flow rate.

(9 VAC 5-40-300)

Included as Condition VI.B.2

Condition E-11: The three (3) heat transfer systems shall be equipped with alarms indicating the absence of liquid flowing to the two (2) heat exchangers/condensers. The alarms shall be maintained in accordance with the manufacturer's specifications.

(9 VAC 5-40-300)

Included as Condition VI.B.3

Recordkeeping

Applicable Requirements from the July 12, 1996 RACT Consent Agreement: The following limitations are applicable requirements from the RACT Consent Agreement issued on July 12, 1996.

Condition E-22: Bear Island shall maintain records of all operating parameters necessary to demonstrate compliance. These records shall be maintained for the two (2) heat exchangers/condensers and associated continuous temperature and flow monitoring equipment and shall include the following:

- a. a maintenance schedule for the heat exchangers/condensers and associated monitoring equipment;
- b. scheduled and unscheduled maintenance records;
- c. an inventory of spare parts that are needed to minimize durations of equipment breakdowns;
- d. written operating procedures;

- e. heat transfer medium inlet and outlet temperatures and temperature differentials (recorded once per eight (8) hour shift);
- f. liquid flow for the two (2) water heat transfer systems (recorded once per eight (8) hour shift);
- g. operating hours and capacity for the four (4) TMP lines recorded daily used to calculate a ninety (90) day rolling average;
- h. results of annual calibrations of the water temperature and flow monitors.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-300)

Included as Condition VI.C.1

Waste Water Treatment Plant – Unit Ref. #5

Applicable Requirements from the July 12, 1996 RACT Consent Agreement: The following limitations are applicable requirements from the RACT Consent Agreement issued on July 12, 1996.

Limitations

Condition E-19: Emissions from the operation of the Waste Water Treatment Plant (WWTP) shall be controlled by good operating practices.

(9 VAC 5-50-20, 9 VAC 5-80-110)

Included as Condition VII.A.1

Monitoring

Applicable Requirement based on Existing Stationary Source Standards – 9 VAC 5-40 and New and Modified Stationary Sources and BACT 9 VAC 5-50: The following limitations are applicable:

All WWTP established parameters used to calculate emissions by the use of appropriate models shall be monitored.

(9 VAC 5-40-300 and 9 VAC 5-50-110)

Included as Condition VII.B.1

Recordkeeping

The permittee shall maintain records of all WWTP operating parameters used to calculate emissions to demonstrate compliance with Condition VII.A of this permit. The permittee shall maintain records of annual emissions calculations and supporting data. These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-40-300 and 9 VAC 5-50-110)

Included as Condition VII.C.1

Paper Mill (Paper Machine) – Unit Ref. #6

Applicable Requirement based on Existing Stationary Source Standards – 9 VAC 5-40 and New and Modified Stationary Sources and BACT 9 VAC 5-50: The following limitations are applicable:

Limitations

Emissions from the operation of the paper machine shall be controlled by good operating practices.
(9 VAC 5-80-110 and 9 VAC 5-50-20)
Included as Condition VIII.A.1

Emissions from the cleaning of the paper machine shall be controlled by the use of good cleaning practices.
(9 VAC 5-80-110 and 9 VAC 5-50-20)
Included as Condition VIII.A.2

Monitoring

Operating and cleaning practices and established parameters used to calculate emissions from the operation of and cleaning of the paper machine shall be monitored.
(9 VAC 5-80-110 and 9 VAC 5-50-20)
Included as Condition VIII.B.1

Recordkeeping

The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include but are not limited to the following:

- a. Annual Volatile Organic Compound (VOC) emissions from the cleaning of the press, calculated monthly as the sum of each consecutive 12-month period.
- b. Monthly and annual throughput of pulp to the paper machine. Annual emissions calculated from the pulp throughput shall be calculated monthly as the sum of each consecutive 12-month period.
- c. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all cleaning solutions used on the paper machine.
- d. Material Safety Data Sheets (MSDS) based on EPA Method 24 or certified product data sheets showing VOC content, toxic compound or HAP content, and water content for all solutions added in the paper making process.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-20 and 9 VAC 5-80-110)
Included as Condition VIII.C.1

Testing – Periodic Monitoring

One (1) initial performance test using reference Method 18 (or equivalent) as approved by DEQ, shall be conducted on the Paper Mill (Bel Baie exhaust) stack emissions for Volatile Organic Compounds (VOCs) within three hundred and sixty four (364) days from the issuance date of this permit. The tests shall be reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained

in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the DEQ Piedmont Regional Office. The permittee shall submit a test protocol at least thirty (30) days prior to testing and a DEQ inspector shall be on site during the testing. Two (2) copies of the test results shall be submitted to the DEQ Piedmont Regional Office within sixty (60) days after test completion and shall conform to the test report format enclosed with this permit.

The Department will compare results of both the initial performance test (stated above) and submitted stack test data from 1995 on the Bel Baie exhaust. The Department will use test results in making the determination to amend the permit or require future testing.
(9 VAC 5-50-30, 9 VAC 5-80-1200, and 9 VAC 5-80-110)
Included as Condition VIII.D.1

Facility-Wide

Applicable Requirement based on Existing Stationary Source Standards – 9 VAC 5-40 New and Modified Stationary Sources (BACT) 9 VAC 5-50 or New Source Review 9 VAC 5-80: The following limitations are applicable:

Limitations

At the time of the issuance of this permit the sludge dryer (Unit Ref. SD-1) has been inoperable for approximately twelve (12) years. The facility shall not operate the sludge dryer without prior notification to the DEQ of their intent to place the equipment back into service. Operation of the sludge dryer may require permit modification.
(9 VAC 5-80-1100 and 9 VAC 5-80-110)
Included as Condition IX.A.1

The cleaning solution used in the seven (7) parts washers located at Bear Island are non-halogen, the solution used does contain VOC therefore Article 24 - Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents shall be applicable. Any change to the current cleaning solution used in the seven (7) parts washers may need a permit to modify.
(9 VAC 5 Chapter 40, Rule 2-24)
Included as Condition IX.A.6

Applicable Requirements from the State Operating Permit (SOP): The following limitations are applicable requirements from the SOP issued on June 30, 2004.

Condition 2: The thermomechanical pulp and paper mill must be constructed and operated as proposed in the initial submittals received by the Board up to and including May 25, 1977. If any changes are made to the thermomechanical pulp and paper process that will cause an increase in emissions of air pollutants, the permit is revoked.
(9 VAC 5-80-1100, 9 VAC 5-80-110)
Included as Condition IX.A.2

Condition 22: The sulfur content of the oil to be burned at the facility shall not exceed 0.2 percent by weight per shipment. The permittee shall maintain records (supplier fuel analysis) of all oil shipments purchased, indicating sulfur content per shipment. These records shall be available on site for inspection by the DEQ. Such records shall be current for the most recent five (5) years.
(9 VAC 5-170-160, 9 VAC 5-80-110 and 5-80-1100)
Included as Condition IX.A.3

Condition 23: Bear Island Paper Company, LLC. shall provide certification for each coal shipment indicating the percent sulfur content by weight. The certification shall be based on samples taken at the coal supplier's loading facility of each coal shipment in accordance with ASTM Method D-2234, Type I, Condition B (August 1989) to determine the percent by weight content of sulfur. In addition Bear Island

Paper Company LLC. shall obtain random samples from each shipment of coal received at the mill and analyze the samples for sulfur. The sulfur records shall be available for inspection by the DEQ. Such records shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-170-160)

Included as Condition IX.A.4

Condition 32: Except where this permit is more restrictive than the applicable requirement, the NSPS, MACT, or NESHAP equipment as described in Condition 2 shall be operated in compliance with the requirements of 40 CFR 60 subpart Db.

(9 VAC 5-50-400 and 9 VAC 5-50-410, 9 VAC 5-80-110)

Included as Condition IX.A.5

Recordkeeping

Condition 33: The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:

- a. Annual throughput of (each permitted fuel) coal, distillate oil, propane, natural gas, wood waste and paper waste/sludge fired in the B&W combination boiler, Unit Ref. No. 2 and the package boiler, Unit Ref. No. 3, calculated monthly as the sum of each consecutive 12-month period.
- b. Certification for each coal shipment purchased, indicating sulfur (not to exceed 1.2 percent and ash (not to exceed 12 percent) content by weight, respectively, per shipment.
- c. Oil shipments purchased, indicating fuel supplier, date on which the oil was received, volume of distillate oil delivered, the sulfur (not to exceed 0.2 percent) and nitrogen (not to exceed 0.3 percent) content by weight per shipment.
- d. Dates and hours of operation for the package boiler not to exceed two thousand eight hundred and eighty hours (2,880) calculate as the sum of each consecutive 12-month period.
- e. CEM records for the package boiler (upon compliance with Specific Condition 17 of permit 06/30/2004).
- f. CEM records for the B&W combination boiler.
- g. Once per shift the electrostatic precipitator meter/gage readings to include the primary and secondary voltage and amperage readings.
- h. Annual capacity factor calculations for the package boiler; annual capacity factor is defined in 40 CFR 60 subpart Db paragraph 60.41b
- i. Records indicating coal usage when wood, wood waste and paper sludge/paper waste is being fired in excess of four hundred and fifty (450) tons per day.
- j. The B&W combination boiler flue gas oxygen content shall be recorded when the boiler is firing wood, wood waste, and paper sludge/paper waste in excess of four hundred and fifty (450) tons per day. The oxygen readings shall be averaged on a thirty-day rolling basis.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50 and 5-80-110)

Included as Condition IX.B.1

Testing

Condition 34: The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 F, 9 VAC 5-80-110)

Included as Condition IX.C.1

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

<u>Pollutant</u>	<u>Test Method</u> <u>(40 CFR Part 60, Appendix A)</u>
VOC	EPA Methods 18, 25, 25a
VOC	EPA Methods 24, 24a
NO _x	EPA Method 7
SO ₂	EPA Method 6
CO	EPA Method 10
PM/PM ₁₀	EPA Methods 5, 17
Visible Emission	EPA Method 9, 22

(9 VAC 5-80-110)

STREAMLINED REQUIREMENTS

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan.

The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This permit shall become invalid five (5) years from the date of issuance. The permittee shall submit an application for renewal of this permit no earlier than eighteen (18) months and no later than six (6) months prior

to the date of expiration of this permit. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the DEQ on the renewal application.
(9 VAC 5-80-110 D and 9 VAC 5-80-80, 9 VAC 5-80-140, 9 VAC 5-80-140)

F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Director, Piedmont Regional Office, within four (4) daytime business hours of the discovery. In addition, the owner shall provide a written statement, within fourteen (14) days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Board.
(9 VAC 5-20-180 C)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

U. Malfunction as an Affirmative Defense

A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250, VAC 5-20-180 and 9 VAC 5-80-110)

STATE ONLY APPLICABLE REQUIREMENTS – Existing Odor (9 VAC 5-40-140)

FUTURE APPLICABLE REQUIREMENTS – Boiler MACT

COMPLIANCE PLAN – N/A
INSIGNIFICANT EMISSION UNITS

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
PH-I2	Ash Handling	9 VAC-5-80-720 B	PM/PM-10	
WWTP-I1	Oil and Water Separator	9 VAC-5-80-720 B	VOC	
WWTP-I2	Lime Silo	9 VAC-5-80-720 B	PM/PM-10	
ST-I1	Paper Machine Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I2	TMP Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I3	WWTP Storage Tanks	9 VAC-5-80-720 C	PM/PM-10, VOC	< 1,000 gallons
ST-I4	Warehouse Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I5	Powerhouse Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I6	Recycle Storage Tanks	9 VAC-5-80-720 B	VOC	
ST-I7	Wood Yard Storage Tanks	9 VAC-5-80-720 C	VOC	< 1,000 gallons
ST-I8	Maintenance Storage Tanks	9 VAC-5-80-720 B	VOC	
MI-I2	Cooling Towers- <u>Non-VOC/Haps</u>	9 VAC-5-80-720 B	-	
MI-I3	Chillers - <u>Non-VOC/Haps</u>	9 VAC-5-80-720 B	-	
MI-I4	Core Cutting Machine/Bevler	9 VAC-5-80-720 B	PM-10	
MI-I5	Diesel Fire Pump	9 VAC-5-80-720 C	VOC, NOx, CO, SO ₂ , PM-10	

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

¹The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Richmond Times Dispatch from November 15, 2004 to December 15, 2004.